In Section 1 of the November 29, 2001 Office Action, the Examiner objected to the drawings because "Comparator" is misspelled in block 560 of Figure 5. The Applicants are submitting herewith a proposed drawing amendment correcting the misspelling in Figure 5. Formal drawings will be submitted upon allowance of claims in the present application.

In Section 2 of the November 29, 2001 Office Action, the Examiner objected to the specification under 37 C.F.R. §1.75(d)(1) as failing to provide proper antecedent basis for the subject matter recited in Claim 16 regarding the "second threshold value... determined by calculating the Ec/Io associated with a pilot channel." The Applicant respectfully disagrees with the Examiner's objection and directs the Examiner's attention to the text of the specification from page 25, line 14 to page 26, line 1, wherein the subject matter recited in Claim 16 is discussed in detail.

In Section 3 of the November 29, 2001 Office Action, the Examiner objected to the Claim 14 because of an informality. The Applicants have found a similar informality in Claim 6. Claims 6 and 14 have been amended to correct this informality.

In Sections 4 and 5 of the November 29, 2001 Office Action, the Examiner rejected Claims 14 and 15 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. The Examiner noted antecedent basis problems in Claims 14 and 15. The Applicants have amended Claims 14 and 15 to correct the antecedent basis problems.

In Sections 6 and 7 of the November 29, 2001 Office Action, the Examiner rejected Claims 1

and 3-7 under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,085,085 to *Blakeney et al.* (hereafter, simply "*Blakeney*") in view of United States Patent No. 6,021,328 to *Curtis et al.* (hereafter, simply "*Curtis*"), and United States Patent No. 6,085,085 to *Kallin* (hereafter, simply "*Kallin*"). In Section 8 of the November 29, 2001 Office Action, the Examiner rejected Claim 2 under 35 U.S.C. §103(a) as being unpatentable over *Blakeney*, *Curtis*, and *Kallin* as applied to Claim 1 and further in view of United States Patent No. 5,548,818 to *Sawyer* (hereafter, simply "*Sawyer*"). In Sections 9-13 of the November 29, 2001 Office Action, the Examiner rejected Claims 8-20 under 35 U.S.C. §103(a) as being unpatentable over various combinations of *Blakeney*, *Curtis*, *Kallin*, *Sawyer* and United States Patent No. 5,999,816 to *Tiedemann* (hereafter, simply "*Tiedemann*").

The Applicants respectfully disagree with the Examiner's rejections of Claims 1-20. In particular, the Applicants direct the Examiner's attention to Claim 1, which recites unique and novel limitations:

> 1. A method within a multi-mode mobile station for communicating over a particular radio system wherein said multi-mode mobile station is capable of selectively communicating over a first radio system and a second radio system and wherein said first radio system is preferred over said second radio system, said method comprising the steps of:
>
> determining whether said preferred first radio system is available to provide mobile service;
>
> accessing said preferred first radio system;
>
> receiving a plurality of messages over a control channel associated with said preferred first radio system;
>
> determining the error rate associated with said plurality of messages;
>
> comparing said determined error rate with a predetermined threshold

value; and

if said determined error rate exceeds said predetermined threshold value, then

accessing said less preferred second radio system. [emphasis added]

The Applicant respectfully asserts that the unique and novel limitations emphasized above in Claim 1 are not disclosed, suggested, or even hinted at in the *Blakeney* reference, the *Curtis* reference or the *Kallin* reference, either alone or in any combination of the three references. The Applicant respectfully asserts that the Examiner has credited the *Blakeney* reference, the *Curtis* reference and the *Kallin* reference with disclosing more than they actually disclose, particularly the *Curtis* reference.

The essential aspect of the present invention in Claim 1 is that the mobile station accesses the less preferred second radio system even though the mobile station is still capable of accessing the preferred first radio system. This is done because the signal from the less preferred second radio system is better that the signal from the preferred first radio system.

The *Blakeney* reference discloses nothing more that a conventional prior art wireless subscriber station (as described by the Applicants in the Background section of the present application) that selects a wireless system in the geographical area of the subscriber station based on a table or list of preferred systems stored in the subscriber station.. This is particularly true of the sections of the *Blakeney* reference relied upon by the Examiner from column 2, line 27 to column 3, line 32. The *Blakeney* reference is silent with respect to a method of accessing a less preferred second radio system even though the mobile station is still capable of accessing a preferred first radio

system.

The *Curtis* reference discloses a conventional wireless mobile station that hands off from a first radio system (i.e., a CDMA network) to a second radio system (i.e., an AMPS network) when the signal quality of the traffic channel becomes so poor that the call may be dropped or the quality is unacceptable. However, the device disclosed in the *Curtis* reference performs the handoff to the second radio system only because the first radio system is no longer available or is about to be unavailable. The Applicants direct the Examiners attention to the text of the *Curtis* reference at column 3, lines 39-59, wherein it states:

> Referring now to FIGS. 2A-2C, hard handoff of a call from a CDMA cell site to an AMPS cell site in accordance with the features of the present invention will be shown and described. In particular, a CDMA cell 204 serviced by a CDMA cell site 206 is overlaid on an AMPS cell 200 serviced by an AMPS cell site 202. It will be recognized that although the CDMA cell 204 is shown as covering the entire geographical area covered by the AMPS cell 200, this will not necessarily be the case. On the contrary, it is possible that only portions of the areas covered by the cells 200, 204, will be the same or that the AMPS cell 200 will cover a greater area than the CDMA cell 204. In addition, it will also be recognized that areas covered by the cells 200, 204, will most likely not be round, as represented in the drawings. Moreover, it will be recognized that the cells 200, 204, are not necessarily the same size, i.e., one may cover a greater area than the other. Accordingly, the term "overlaid" will be used to encompass any of these situations in which a CDMA cell, such as the cell 204, covers at least some of the same geographical area as covered by an AMPS cell, such as the cell 200.
>
> As shown in FIG. 2A, a mobile unit 208 is in communication with an MSC 210 via an RF link 212 between the mobile unit and the CDMA cell site 206 and a hardware link 214 between the CDMA cell site and the MSC. Referring to FIGS. 2B and 2C, as the mobile unit 208 continues to move in a direction indicated by an arrow Z, an obstruction 216 begins to interfere with the RF link 212 between the mobile unit and the CDMA cell site 206. Accordingly, as will be described in detail below, once the call quality has degraded to a point at which it is likely that the call will

> eventually be dropped, the links 212 and 214 are terminated and an RF link 218 between the AMPS cell site 202 and the mobile unit 208 is established, such that the mobile unit is in communication with the MSC 210 via the RF link 218 and a hardware link 220 between the AMPS cell site and the MSC. [emphasis added]

As the above-cited portions of the *Curtis* reference clearly demonstrate, the mobile unit 208 is handing off from the CDMA radio system to the AMPS radio system because there is no other CDMA radio system base station to which the mobile unit 208 may hand off. Furthermore, unlike the present invention, the mobile station described in the *Curtis* reference does not choose a radio system to access based on the quality of the control channel signals (i.e., paging, pilot, sync signals), as the Examiner himself has admitted. Rather, the device disclosed in the *Curtis* reference evaluates the quality of the traffic channel, which occurs after the control channel signals have already been evaluated.

Finally, the *Kallin* reference does nothing to overcome the shortcomings of the *Blakeney* reference and the *Curtis* reference. The Examiner relied upon the *Kallin* reference at column 1, line 62 to column 2, line 46, wherein it states:

> . . . In conventional systems, there are three main reasons why an idle mobile station rescans the paging channel: loss of data, mobile station autonomous rescan, or a system message. Each of these is discussed below.
>
> Regarding loss of data, the Total Access Communication System (TACS) standard, used mostly in the United Kingdom and China, indicates that if data cannot be correctly decoded for 5 seconds, the mobile station must rescan the paging channels. The Advanced Mobile Phone Service, Inc. (AMPS) specification, published by AT&T in 1983, indicates that a rescan must be done if five consecutive word synchronization sequences are received in error.
>
> Regarding autonomous mobile station rescan, the AMPS standard specifies that each mobile station should have a rescan timer of five minutes which is reset

> every time the mobile station performs a rescan. When this timer times out, the mobile station carries out a rescan of the paging channels.
>
> The third reason for a mobile station to rescan is if the system sends a rescan message in the Global Action Overhead Message--GAOM. When this message is received, all mobile stations receiving the message will rescan and select the paging channel with the strongest signal strength. This message could be sent, for example, from a base station immediately before it is shut down, due to, for example, hardware problems, or temporary maintenance. This would cause the mobile stations locked to the paging channel associated with the closing base station to lock onto the paging channels of surrounding cells instead. . . [emphasis added].

As the Examiner can clearly see, the above-cited portions of the *Kallin* reference are directed entirely to the reasons why a wireless mobile station may perform a rescan of the paging channels, but is completely silent with respect to a method of accessing a less preferred second radio system even though the mobile station is still capable of accessing a preferred first radio system.

In sum, Claim 1 contains unique and novel limitations that are not disclosed, suggested, or even hinted at in the *Blakeney* reference, the *Curtis* reference or the *Kallin* reference, or in any combination of the *Blakeney*, *Curtis*, and *Kallin* references. This being the case, the Applicants respectfully assert that Claim 1 is patentable over any and all combinations of the *Blakeney*, *Curtis*, and *Kallin* references. The Applicants also note that neither the *Sawyer* reference nor the *Teidemann* reference do anything to overcome the shortcomings of the *Blakeney*, *Curtis*, and *Kallin* references. Thus, Claim 1 is patentable over any combination of the *Blakeney*, *Curtis*, *Kallin*, *Sawyer*, and *Teidemann* references.

Additionally, Claims 2-7 depend from Claim 1 and contain all of the unique and novel limitations recited in Claim 1. This being the case, Claims 2-7 are patentable over any combination

of the prior art references.

The Applicants note that independent Claims 8 and 17 contain unique and novel limitations that are analogous to the unique and novel limitations recited in Claim 1. Thus, Claims 8 and 17 are patentable over any combination of the *Blakeney*, *Curtis*, *Kallin*, *Sawyer*, and *Teidemann* references. Finally, the Applicants note that dependent Claims 9-16 depend from Claim 8 and dependent Claims 18-20 depend from Claim 17. Thus, Claims 9-16 and Claims 18-20 contain all of the unique and novel limitations recited in Claims 8 and 17 respectively. Therefore, Claims 9-16 and Claims 18-20 are patentable over any combination of the *Blakeney*, *Curtis*, *Kallin*, *Sawyer*, and *Teidemann* references.

SUMMARY

For the reasons given above, the Applicant respectfully requests reconsideration and allowance of pending claims and that this Application be passed to issue. If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at ***jmockler@novakov.com***.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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APPENDIX A

1. A method within a multi-mode mobile station for communicating over a particular radio system wherein said multi-mode mobile station is capable of selectively communicating over a first radio system and a second radio system and wherein said first radio system is preferred over said second radio system, said method comprising the steps of:

determining whether said preferred first radio system is available to provide mobile service;

accessing said preferred first radio system;

receiving a plurality of messages over a control channel associated with said preferred first radio system;

determining the error rate associated with said plurality of messages;

comparing said determined error rate with a predetermined threshold value; and

if said determined error rate exceeds said predetermined threshold value, then accessing said less preferred second radio system.

2. The method of claim 1 wherein said step of determining whether said preferred first radio system is available further comprises the step of determining whether an acceptable number of said messages are received within a predetermined time period.

3. The method of claim 1 wherein said step of determining whether said preferred first radio system is available further comprises the step of determining whether a pilot signal from said preferred first radio system is detectable.

4. The method of claim 1 wherein said messages are page channel (PCH) messages.

5. The method of claim 1 wherein said step of determining said error ate comprises the step of determining a Frame Error Rate (FER) associated with said plurality of messages.

6. (Amended) The method of claim 5 wherein said step of determining said FER is performed while said multi-mode mobile station is in an Idle state.

7. the method of claim 5 wherein said step of accessing said less preferred second radio system is performed after said determined FER exceeds said predetermined threshold value over a plurality of consecutive time periods.

8. A method of selecting a radio system within a multi-mode mobile station wherein said multi-mode mobile station is capable of selectively communicating over a first radio system and a

second radio system, said method comprising the steps of:

accessing said first radio system by said multi-mode mobile station;

periodically receiving a message signal voer a forward channel associated with said first radio system;

determining the number of message signals received within a first predetermined time period;

determining the error rate associated with said message signals received within a second predetermined time period; and,

accessing said second radio system in response to a determination that the number of message signals received within said first predetermined time period meets a first threshold value, but that said error rate associated with said message signals exceeds a second threshold value.

9. The method of claim 8 wherein said step of receiving said message signal comprises the step of receiving a page message over a page channel (PCH).

10. The method of claim 8 wherein said step of determining said error rate comprises the step of determining a Frame Error Rate (FER) associated with said received message signals.

11. The method of claim 8 wherein said first radio system is preferred over said second radio system within said multi-mode mobile station.

12. The method of claim 11 wherein said first system comprises a Code Division Multiple Access (CDMA) system.

13. The method of claim 11 wherein said second system comprises a Advanced Mobile Phone System (AMPS).

14. (Amended) The method of claim 8 wherein said step of determining said [FER] error rate is performed while said multi-mode mobile station is in an Idle state.

15. (Amended) The method of claim [8] 14 wherein said step of accessing said second radio system is performed after said determined [FER] error rate exceeds said predetermined threshold value over a plurality of time periods.

16. The method of claim 8 wherein said second threshold value is determined by calculating a signal-to-noise ratio (Ec/Io) associated with a pilot channel.

17. A multi-mode mobile station for selectively communication over a first radio system

and a second radio system wherein said first radio system is preferred over said second radio system, comprising:

means for determining whether said first radio system is available to provide service;

means for accessing said first radio system;

means for receiving messages over a forward channel associated with said first radio system;

means for determining an error rate associated with said received messages;

means for comparing said determined error rate against a particular threshold value; and

means for accessing said second radio system in response to a determination that said determined error rate exceeds said particular threshold value.

18. The multi-mode mobile station of claim 17 wherein said messages received over said forward channel comprise page messages over a page channel (PCH).

19. The multi-mode mobile station of claim 17 wherein said means for determining said error rate associated with said received messages comprises means for determining a Frame Error Rate (FER) associated with said messages.

20. The multi-mode mobile station of claim 17 wherein said threshold value is determined by calculating a signal-to-noise ratio (EcIo) associated with a pilot channel.